

ABSTRACT OF THE DISCLOSURE

[0035] A drive axle assembly includes first and second axleshafts connected to a pair of wheels and a drive mechanism operable to selectively couple a driven input shaft to one or both of the axleshafts. The drive mechanism includes a differential assembly, a planetary gear assembly operably disposed between the differential assembly and the first axleshafts and first and second mode clutches. The first mode clutch is operable with the planetary gear assembly to increase the rotary speed of the first axleshaft which, in turn, causes a corresponding decrease in the rotary speed of the second axleshaft. The second mode clutch is operable with the planetary gear assembly to decrease the rotary speed of the first axleshaft so as to cause an increase in the rotary speed of the second axleshaft. A control system controls actuation of both mode clutches.